

FIGURE 1

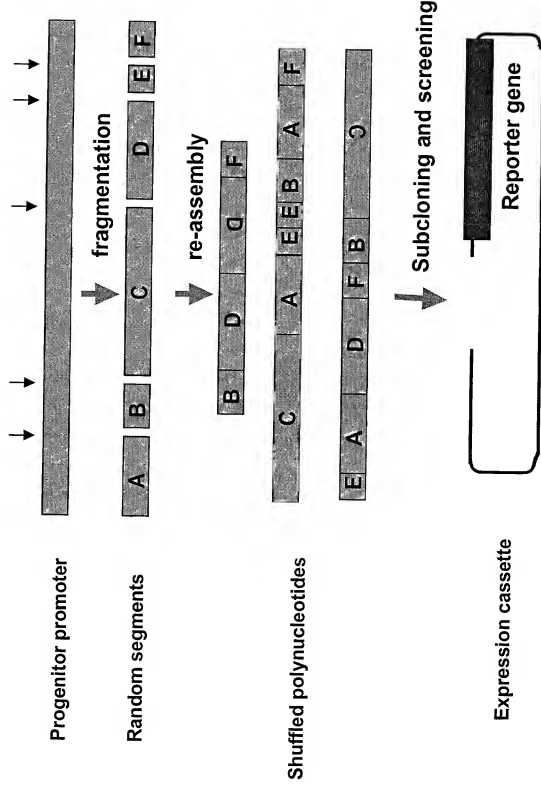


FIGURE 2

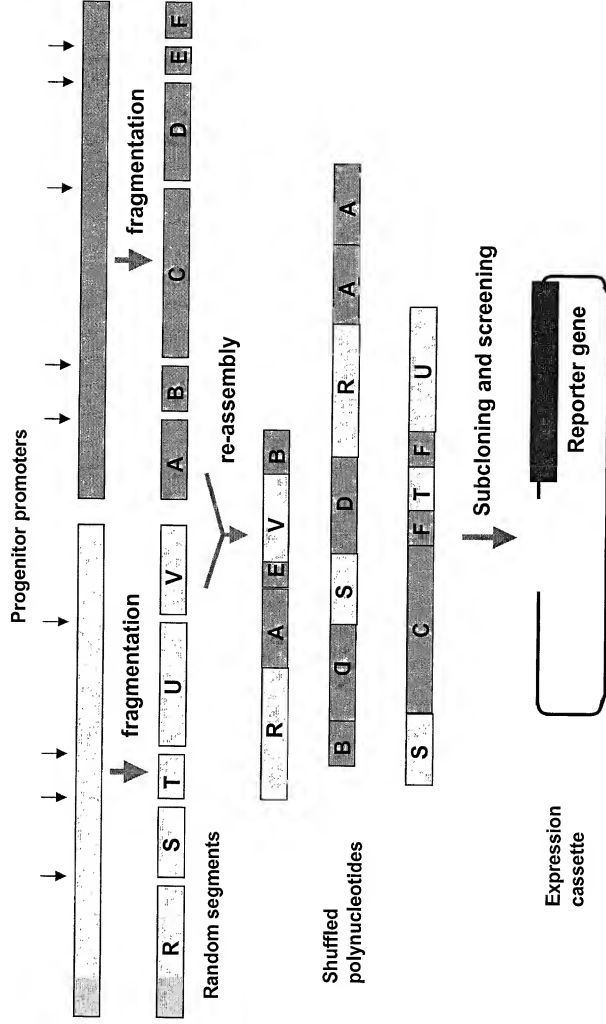


FIGURE 3

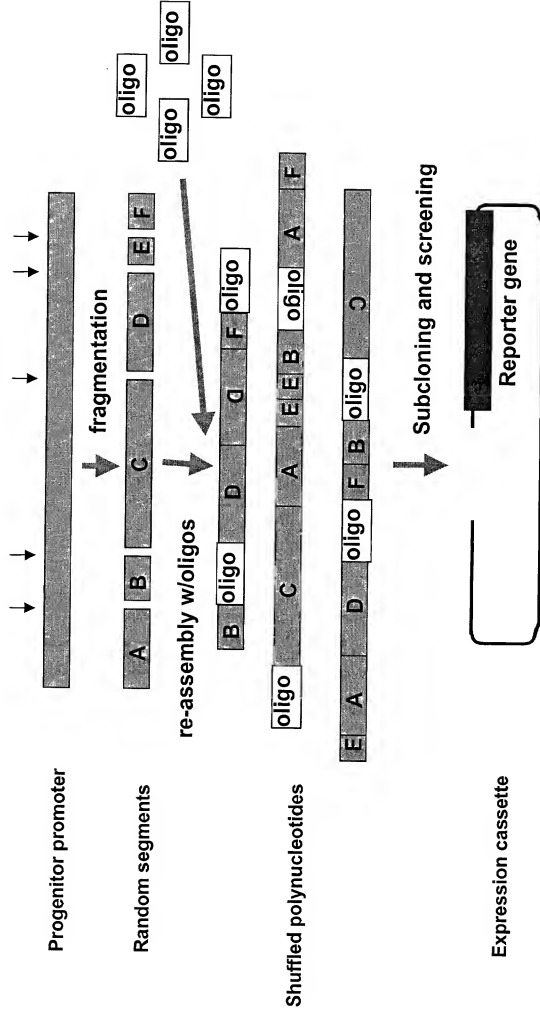
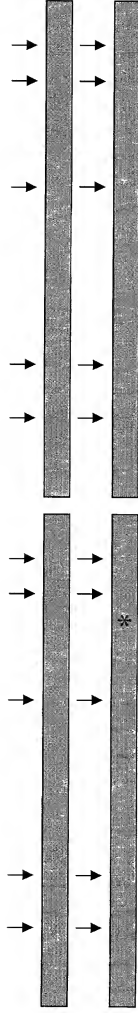


FIGURE 4

Progenitor promoters



Random segments

fragmentation



re-assembly

Shuffled
polynucleotides

Subcloning and screening

Expression
cassette* = point mutation
(ex. mutagenic PCR)